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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/993,898 | 11/27/2001 | Mutsumi Nakajima | 925-220 | 7680 |
| 23117 | 7590 | 02/13/2004 | EXAMINER | |
| NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714 | | | DUONG, TAI V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2871 | |

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,898

Applicant(s)

NAKAJIMA, MUTSUMI

Examiner

Tai Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/10/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/27/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5 and 10-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 3, 5 and 10, it is unclear what are the bounds of the recited phrases “a majority portion of a display screen” and “a majority portion of each of a plurality of the pixel electrodes”. It is noted that these phrases are *relative* phrases. However, the instant specification does not provide any standard for measuring or defining the relative term “majority” In other words, how the auxiliary capacitor electrode is determined as “formed over a majority portion of a display screen and overlaps a majority portion of each of a plurality of the pixel electrodes” as compared with the case “formed over a minority portion of a display screen and overlaps a minority portion of each of a plurality of the pixel electrodes”. See M.P.E.P. 2173.05(b). The remaining claims are also rejected since they depend on the indefinite claims. Is the limitation “having at least partially been removed” a product-by-process limitation? For device claims, this limitation is interpreted by the examiner as “ the auxiliary capacitor electrode is not formed at the region corresponding to a gap between the adjacent pixel electrodes”.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2 and 4 stand rejected under 35 U.S.C. 102(e) as being anticipated by Nakagawa et al.

Note in Figs. 4 and 5 the auxiliary capacitor electrode 11 not being formed at a region corresponding to a gap in the vertical direction between the adjacent pixel electrodes 9, the auxiliary capacitor electrode being opposed to the pixel electrode 9 with an insulation film (4 or 10) therebetween, and the auxiliary capacitor electrode 11 being at least partially laid over the scanning line 3 (col. 2, lines 35-42).

With respect to Applicant's remarks that Nakagawa's floating electrodes 11 overlap very *little* of the pixel electrodes and are provided over a very *small* portion of the display screen, as compared with the recited phrase "formed over a majority portion of a display screen ... and overlaps a majority portion of each of a plurality of the pixel electrodes" of claim 1, since the instant specification does not provide any standard for measuring or defining the relative term "majority" (e.g., how major is major?), Nakagawa's floating electrodes can be considered as "major" (as compared with the case "barely overlapping").

Claims 3, 5 and 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 11-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 3, 5 and 10-16 would be allowable over the prior art because none of the prior art discloses or suggests the auxiliary capacitor electrode, having structure recited in claim 1, being made of a light permeable material and disposed in at least one portion of an opening of each of the pixels. Also, none of the prior art discloses or suggests the auxiliary capacitor electrode and the light-shielding film being opposed to the pixel electrode with an insulation film therebetween, a region of the auxiliary capacitor electrode and of the light-shielding film corresponding to a gap between the adjacent pixel electrodes having at least partially been removed.

Claims 6-8 are allowed because none of the prior art discloses or suggests a light-shielding film being opposed to a plurality of the pixel electrodes with an insulation film interposed therebetween, a region of the light-shielding film corresponding to a gap between adjacent pixel electrodes having at least partially been removed wherein a width of an area where the light-shielding film has been removed is larger than a width of the gap between the adjacent pixel electrodes.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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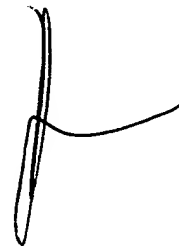
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number 703 308-4873.


TVD

02/04



KENNETH PARKER
PRIMARY EXAMINER